

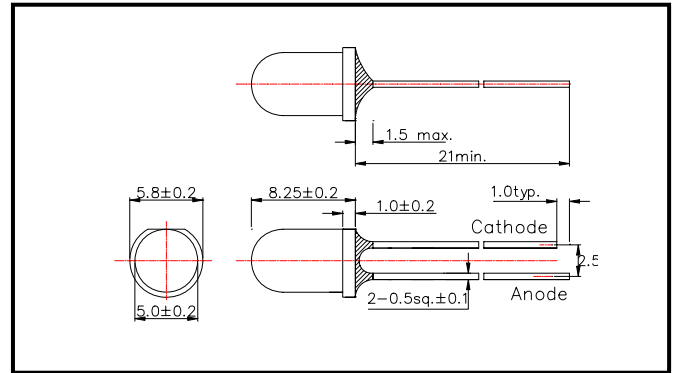
L750-03AU Infrared LED Lamp

L750-03AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 750nm.

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L750-03AU
- 3) Chip
- (1) Chip Material AlGaAs
- (2) Peak Wavelength 750nm typ.
- 4) Package
- (1) Type Φ 5mm clear molding
- (2) Resin Material Epoxy Resin
- (3) Lead Frame Soldered

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
|-----------------------|-----------|---------------------|------------------|--------------------------|
| Power Dissipation | P_D | 200 | mW | $T_a = 25^\circ\text{C}$ |
| Forward Current | I_F | 100 | mA | $T_a = 25^\circ\text{C}$ |
| Pulse Forward Current | I_{FP} | 500 | mA | $T_a = 25^\circ\text{C}$ |
| Reverse Voltage | V_R | 5 | V | $T_a = 25^\circ\text{C}$ |
| Operating Temperature | T_{OPR} | -30 ~ +85 | $^\circ\text{C}$ | |
| Storage Temperature | T_{STG} | -30 ~ +100 | $^\circ\text{C}$ | |
| Soldering Temperature | T_{SOL} | 260 | $^\circ\text{C}$ | |

‡Pulse Forward Current condition : Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

◆ Electro-Optical Characteristics

| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
|----------------------|-----------------|---------------------|---------|----------|---------|---------------|
| Forward Voltage | V_F | $I_F = 50\text{mA}$ | | 1.85 | 2.00 | V |
| Reverse Current | I_R | $V_R = 5\text{V}$ | | | 10 | μA |
| Total Radiated Power | P_O | $I_F = 50\text{mA}$ | 13.0 | 18.0 | | mW |
| Radiant Intensity | I_E | $I_F = 50\text{mA}$ | 35 | 70 | | mW/sr |
| Peak Wavelength | λ_P | $I_F = 50\text{mA}$ | 730 | 750 | 770 | nm |
| Half Width | $\Delta\lambda$ | $I_F = 50\text{mA}$ | | 30 | | nm |
| Viewing Half Angle | $\theta_{1/2}$ | $I_F = 50\text{mA}$ | | ± 15 | | deg. |
| Rise Time | t_r | $I_F = 50\text{mA}$ | | 80 | | ns |
| Fall Time | t_f | $I_F = 50\text{mA}$ | | 80 | | ns. |

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.